# byse market report: plastics, December 2020

### 1 General economy with reference to the plastics industry

2020 was a difficult year for the whole plastics sector. Never before have we seen so many changes! Parts of the plastics sector are being rearranged. Many plastic producers are suffering from falling sales and plastics processes are having to cope with marked falls in orders. Furthermore, orders for machines from plant manufacturers are stalling. And the outlook is bleak for plastics recyclers.

For the first time, the crisis has shown that there are two very different pricing methods on the markets. Whereas the prices for virgin grades are largely linked to slide in the oil price, recyclates mainly form the environmental part. It was astonishing that recyclates were able to replace virgin grade for a long time and at prices that were adequate for the plastics producers. Even before, the gap between the virgin grade prices and recyclate prices had widened in such a way that certain recyclates exceeded virgin grade prices. This development intensified due to covid; for many commodities, recyclate prices are above those of virgin grades.

And, therefore, many established markets for recyclers are crumbling away. Many recyclers were surprised how quickly recyclates have been suppressed by virgin grades, even in applications that have been tried and tested over many years.

In a counter-trend, selected fillers and packers are actively turning to plastic recycling. These packers recognised the sustainability of plastic recycling at an early stage and advertise with this fact. And these packers are very successful on the market. The beauty of a greater use of recyclates is that their use in packagings strengthens the circular economy. There are still far too few packers who use recyclates in their products.

We often see that the packaging industry is replacing plastic packagings by paper and board compounds. This trend towards paper and board compounds is even sadder given the fact that the recyclability of the compounds is extremely limited or barely possible. A particularly sad example of compound packaging for the author is the beer bottle made of paper and board compound - cheers!

### 2 Virgin grade: The market for standard plastics

Everyone is talking about a crisis - only the packaging sector is booming; packaging plastics are in high demand, especially in the food sector. German plastics processors are expecting further price rises and are therefore buying in advance. Moreover, there is increased demand abroad, which can be seen in the exports to the Far East.

Continuous price rises since May 2020: The average price for standard plastics rose by as much as  $129 \ \text{€/t}$ , from  $882 \ \text{€/t}$  in May 2020 to  $1,011 \ \text{€/t}$  in November 2020; see EUWID, www.euwid-recycling.de. In November 2020 the average price was an average  $17 \ \text{€/t}$  higher than in the previous month  $(994 \ \text{€/t})$ , see Table 1. This change in the quote is due to PS, which is quoted by an average  $48 \ \text{€/t}$  higher, and PVC, which is an average  $40 \ \text{€/t}$  higher; all other commodities remain the same. The prices for standard plastics are back at the same level as the previous year! In a year-on-year comparison, it can be seen that the average quotes from November 2020  $(1,011 \ \text{€/t})$  were  $96 \ \text{€/t}$  lower than those of the previous year  $(1,107 \ \text{€/t})$ .

Packaging PET was quoted at an average price of 930 €/t in November 2020, thus unchanged in comparison with the previous month. Christmas trade is increasing demand for PET; but it is much lower than last year due to coronavirus.

# bvse market report: plastics, December 2020

Table 1: Standard plastics prices according to EUWID over the past five months, listed in €/t.

Prices in €/t	Nov. 2020	Oct. 2020	Sept. 2020	Aug. 2020	July 2020	
LDPE film grade	930- 1040	930- 1040	930- 1040	880- 980	850- 950	
LLDPE film grade	940- 1040	940- 1040	940- 1040	890- 990	870- 970	
HDPE injection moulding	930- 1000	930- 1000	930- 1000	890- 970	860- 940	
HDPE blow	930- 1030	930- 1030	930- 1030	900- 1000	880- 960	
moulding	930-1030	930-1030	930- 1030	900-1000	000- 900	
PS crystal clear	1050- 1110	1000- 1060	1000- 1060	1030- 1090	1030- 1090	
PS high impact	1130- 1190	1080- 1150	1080- 1150	1110- 1180	1110- 1180	
PP homopolymer	1000- 1070	1000- 1070	1000- 1070	1020- 1080	1000- 1060	
PP copolymer	1050- 1120	1050- 1120	1050- 1120	1060- 1120	1050- 1110	
PVC tube grade	860- 930	820- 890	750- 800	710- 760	700- 740	
PVC film/cables	910- 960	870- 920	790- 840	750- 800	740- 780	
Average Price	1011 ± 87	994 ± 87	978 ± 112	961 ± 134	944 ± 138	

#### 3 Secondary plastics markets in the plasticker price index

The plasticker internet platform, see <a href="http://plasticker.de">http://plasticker.de</a>, publishes quotes on an hourly basis. The present market report indicates the final monthly prices. It is only possible to represent the preliminary prices for the month of the report, in this case December 2020; they will not become definitive until early January. The two quotes stated for December 2020 below indicate only an interim situation, see the left-hand column in Table 2 and Table 3.

#### 3.1 plasticker: Standard plastics

An average price of 444 €/t is calculated for November 2020. And this average price is thus 26 €/t lower than that of the previous month (470 €/t), see Table 2. The average price for November 2020 (444 €/t) was 45 €/t below that of the previous year (489 €/t). The November price index shows subdued demand for plastic.

Only one significant price change (±40 €/t) can be seen, namely for LDPE regranulates at -50 €/t. The other prices changes, such as for PP bale goods, SP regranulates, PVC-P regrind, PVC\_U regrind and PET bale goods, are not of sufficient statistical significance for their contribution to be listed here. The price of HDPE regrind is persisting at its 5-year low of 490 €/t.

The preview of the December quotes indicates an average price of 446 €/t, see Table 2. The price index of 11.12.2020, shows subdued demand for plastic.

Table 2: Standard plastics price according to plasticker; listed in €/t.

	December <sup>6</sup> 20	Nov. 20	Oct. 20	Sept. 20	Aug. 20	Nov. 19
HDPE regrind <sup>1</sup>	490	490	490	490	490	600
HDPE regranu- lates <sup>5</sup>	700	670	690	700	690	790
LDPE bale goods <sup>2</sup>	160*	200*	170	170	170	80
LDPE regrind <sup>1</sup>	410	470	470	430	430	490
LDPE regranu- lates <sup>5</sup>	600	540	590	590	580	660
PP bale goods <sup>3</sup>	170*	170*	270*	450*	240*	190*
PP regrind <sup>1</sup>	510	480	480	490	450	570
PP regranulates <sup>5</sup>	730	690	710	720	670	820

# bvse market report: plastics, December 2020

PS regrind <sup>4</sup>	510	540	550	540	570	600
PS regranulates <sup>5</sup>	700*	700*	930	790	810	850
PVC_P regrind <sup>1</sup>	380*	350*	480*	460*	250*	290*
PVC_U regrind <sup>1</sup>	260*	430	420	290*	230*	420
PET bale goods	210*	180*	70*	90*	160*	150*
PET regrind mixed colours	360	300	260	300	290	340
Average Price	(446)	444	470	465	431	489

<sup>\*:</sup> Supply figure too low to attain statistical significance; ¹: equivalent to the grade "post-industrial mixed colours"; ²: equivalent to K49; ³: equivalent to K59; ⁴: equivalent to "standard, mixed colours"; ⁵: equivalent to the grade "regranulates, black"; ⁶: preview (may be amended by additional quotes)

## 3.2 plasticker: Technical plastics

Only small movements in the average prices for technical plastics can still be seen, see Tab. 3. In November 2020 the average price for technical plastics in plasticker is  $1,172 \in /t$  and thus almost unchanged in comparison to the previous month  $(1,173 \in /t)$ . A comparison of the average prices from November 2020  $(1,172 \in /t)$  with those of the previous year  $(1,188 \in /t)$  shows a difference of only  $16 \in /t$ .

These plastics show price changes of more than ± 70 €/t: PC regranulates +150 €/t, PA 6 regranulates +130 €/t and POM regranulates -470 €/t. The November price index records subdued demand for plastic in comparison with the previous month.

The preview of the December quotes shows an average price for technical plastics that has changed only slightly. The average price in December  $(1,158 \in /t)$  was quoted at only  $14 \in /t$  lower than in the previous month  $(1,172 \in /t)$ . The November price index of 11.11.2020 shows subdued demand for plastic.

Table 3: Technical plastics price according to plasticker; listed in €/t.

	December <sup>6</sup> 20	Nov. 20	Oct. 20	Sept. 20	Aug. 20	Nov. 19
ABS regrind	560	560	550	550	550	610
ABS regranu- lates <sup>5</sup>	1190	990	1000	1030	1100	1090
PC regrind	790	780	820	850	840	970
PC regranulates⁵	1490	1880	1730	1700	1560	1680
PBT regrind	410	430	440	440	420	520
PBT regranulates	1720	1670	1600	1770	1630	1570
PA 6 regrind	880	870	820	810	830	880
PA 6 regranu- lates <sup>5</sup>	1900	1800	1670	1810	1820	1760
PA 6.6 regrind	870	920	860	870	890	940
PA 6.6 regranu- lates <sup>5</sup>	2080	2100	2090	2110	2050	2060
POM regrind	560	570	540	560	580	620
POM regranu- lates <sup>5</sup>	1440	1490	1960	1310	1440	1550
Average Price	(1158)	1172	1173	1151	1143	1188

<sup>&</sup>lt;sup>5</sup>: equivalent to the grade "regranulates, black"; <sup>6</sup>:preview (may be amended by additional quotes).

# byse market report: plastics, December 2020

#### 4 Evaluation of the secondary plastic markets

### 4.1 Plastic wastes and recyclates

And now the total lockdown in the run up to Christmas. Plastic recycling in particular will suffer. Plastics recyclers usually shut down their plants at the end of the year in order to carry out maintenance. But new production starts again from mid-January at the latest. The news at the moment leads us to believe that the lockdown could last longer. And this means that plastic recycling will be under great, extremely great pressure for the second time. A Marshall Plan is urgently needed if the existing plastic recycling system is to survive. The plastics processing industry and the fillers and packers are called up to implement their voluntary undertaking to increase the use of recyclates immediately. Now is finally the time for action - there has been enough discussion. Precious time to keep plastic recycling in Germany in its European leading position has been wasted.

The changes in virgin grades can also be seen in secondary plastics: PS virgin grades are quoted at an average 48 €/t higher and PVC virgin grade at an average 40 €/t higher. And, as a mirror image, it can be seen that PS production waste are quoted at an average 13 €/t higher and production waste from PVC windows at an average 47 €/t higher.

In the EUWID price index for waste plastics, production waste quotes for PE and PP are unchanged. Good films are still in demand in the crisis because the amount of films from commerce and industry is still relatively low. In November, the mean EUWID quotes for PE post user films are: LDPE shrink hoods natural 295  $\[ \in \]$ /t, LDPE shrink hoods mixed colours 70  $\[ \in \]$ /t, thin film transparent natural 185  $\[ \in \]$ /t, thin film transparent coloured 38  $\[ \in \]$ /t, LDPE agricultural film -43  $\[ \in \]$ /t, commercial mixed film (90/10) 90  $\[ \in \]$ /t and commercial mixed film (80/20) 63  $\[ \in \]$ /t.

### 4.2 PET Recycling

The cheap virgin grade is pushing recyclates out of their traditional markets. PET virgin grades are sometimes available for less than 700 €/t. In November, unchanged virgin grade prices are countered by falling prices for regranulates and flakes. At the end of the year, more beverages in PET bottles are consumed because of the Christmas holidays, which improves the supply of used bottles. In November, the prices for PET transparent, PET mixed and PET coloured remain unchanged.

#### 5 Explanation on the price quotes

A detailed discussion with information of price indices for virgin grades and waste plastics as well as precursor products can be found in EUWID Recycling and Disposal see <a href="https://www.euwid.de">www.euwid.de</a>, or in EUWID Plastics <a href="https://www.euwid-kunststoff.de">www.euwid-kunststoff.de</a>. EUWID: No guarantee for any of the prices.; prices ex station. As a rule, the prices quoted refer to quantities in excess of 20 tons.

The quotes for secondary prices, which are updated on an hourly basis, can be calculated using the price lists that are derived from the quotations published in the raw material exchange plasticker, see <a href="www.plasticker.de">www.plasticker.de</a>. The prices listed in this index are quoted without reservation - as the majority of the quotes submitted are not necessarily equivalent to the sales prices. Plasticker offers the quality grades regrind and regranulates both as virgin materials and as secondary goods. The term 'bale goods' refers to waste plastics only. Furthermore, plasticker does not distinguish between the following grades: transparent, mixed colours or colour-separated. Therefore, the information provided by plasticker may indicate different market behaviour than the prices quoted by EUWID